

Abstract

Charles University in Prague

Faculty of Pharmacy in Hradec Kralove

Department of Biological and Medical Sciences

Degree program: Medical bioanalysis

Field of study: Medical Laboratory Technician

Author: Jitka Žáková

Title: Application of electromigration methods in the analysis of *Francisella tularensis* proteins

Bachelor thesis

Theoretical part describes pathogenic bacterium *Francisella tularensis* (taxonomy, morphology, cultivation, mode of disease, sources of infection, epidemiology) and basic characterisation of electromigration methods (electrophoresis, isoelectric focusing, isotachopheresis, capillary electrophoresis).

Experimental part contains methods and results of selected electromigration experiments (1DE SDS-PAGE, 2 DE SDS-PAGE). We chose the methods that prove to be usefull in generating data suitable for current publication in international journals, thus illustrating the significance in analysis of *F. tularensis* proteome.